

# Bachelor's Degree and Career Destination

*A new tool matches educational programs to occupations.*

The new Bachelor's Degree and Career Destination (BDCD) tool maps post-secondary fields of study to occupational outcomes to contribute to our understanding of post-secondary education outcomes.<sup>1</sup> Funded through a 2015 State Longitudinal Data Systems (SLDS) grant from the U.S. Department of Education, users may access the tool at [mn.gov/deed/bdcd](http://mn.gov/deed/bdcd).

The tool uses empirically-based evidence to map individuals' undergraduate fields of study to their actual job. Based on Minnesota data from the American Community Survey, the tool is designed for anyone interested in exploring patterns of occupational outcomes by undergraduate field of study.

The BDCD is a visual display of fields of study at the bachelor's level and labor market outcomes for Minnesota residents. Specifically, the BDCD provides information on occupations, employment and unemployment, labor force participation, and wage and salary income.

The data tool comprises a two-way display that answers two questions:

### ***What occupations do undergraduate degree holders enter?***

The data tool allows users to search and select fields of study from a menu of general or detailed fields of study. After selecting a field, the tool will show the percent frequency

distribution of occupations held by undergraduate degree holders who majored in that field. The data are available for currently employed working-age adults, 25 to 64 years old, or it can be further broken down by ten-year age intervals (25 to 34; 35 to 44; 45 to 54; 55 to 64).

### ***What majors do incumbents of occupations come from?***

The BDCD tool allows users to search and select general or detailed occupations from a menu. Upon selecting an occupation, the tool will show the sorted percent frequency distribution of incumbents by field of degree. The data are available for working-age adults in ten-year age intervals.



<sup>1</sup>The DEED tool was funded by a 2015 State Longitudinal Data Systems (SLDS) grant from the U.S. Department of Education.

### Why Do We Need This Tool?

One of the critical challenges of the labor market is to align the supply and demand of skilled workers to ensure that workers can find jobs and that vacant jobs are quickly and efficiently filled. Reliable data help students make informed choices about their fields of study and future career paths.

Past research looking at the link between supply and demand has been based in theoretical approaches, for example where we expect graduates to be employed, rather than empirical evidence. This data tool summarizes self-reported occupational outcomes of Minnesotans with a bachelor’s degree.

The tool shows the progression of occupational pathways and

associated median earnings and other labor force outcomes by age. The underlying premise for the age breakdown is that occupational choices are not necessarily set for life and depending on the field of study, occupational pathways may change over time.

The data tool shows the percent frequency distribution by occupation for each field of study as well as the distribution of fields of study by occupation. This is a good way to understand the relative importance and likelihood of fitting into an occupation with a specific major, and which college majors most occupational incumbents come from.

For example, an undergraduate student interested in becoming a management analyst will find that about 18 percent of management analysts hail from

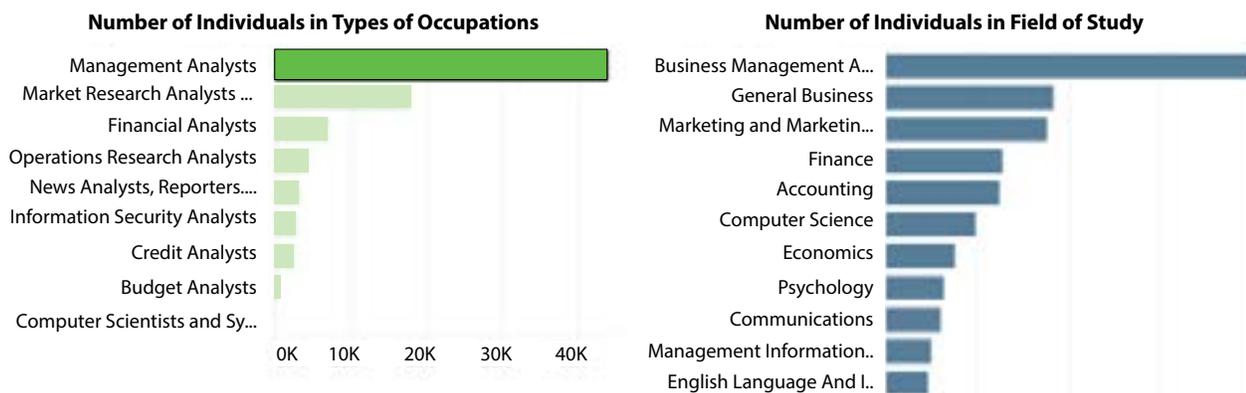
the business management and administration field. However, 28 percent are from the next four most common fields of study: general business, marketing, finance and accounting, while computer science, economics, psychology, communications, management information and statistics round out the top ten fields of study. In this and many other occupations, students representing a variety of majors still have a good chance of landing a job in their chosen occupations.

Below is an example of the information the BDCD tool offers.

### How to Use the BDCD Tool

Shannon, a fictitious high school senior for purposes of this article, is exploring college majors. She needs information

Minnesotans who work in the following occupations have a bachelor’s degree in these detailed fields of study.





on outcomes of various college majors. Her choices are based on her interests as well as prospective employment outcomes of majoring in a specific discipline. She has heard that a business major is one of the most lucrative. Shannon uses the BDCD to explore business major outcomes to help inform her decision-making.

The BDCD gives her the following information: The first encouraging news for Shannon is that business is the most popular general field of study. Twenty-six percent of bachelor's degree holders in Minnesota majored in business, making this the most frequently selected college major. Within business as a general field of study, there are many specific tracks. The most popular track (31.3 percent of business majors) is business management and administration.

Also popular are general business (19.2 percent), accounting (17.5 percent), marketing and market research (13.6 percent), finance (8.8 percent), management information and statistics (2.5 percent), and human resources and personnel management (1.8 percent).

Shannon further learns that bachelor degree holders with a business major fit into a variety of management, supervisory, and related occupations, but the most popular occupation is accountants and auditors, with 11 percent of business majors choosing this occupation. This is followed by miscellaneous managers (6.4 percent), sales representatives (3.9 percent), financial managers, first-line supervisors of retail sales workers, and management analysts (2.9 percent).

Shannon notices that specific business tracks lead to somewhat different occupational and employment outcomes. For example, 43 percent of accounting majors work specifically as accountants and auditors compared to finance majors who work in more diverse occupations, including accountants and auditors (9.3 percent), financial managers (7.1 percent) and chief executives and legislators (6.1 percent). Accounting majors report 1.0 percent unemployment, but a business economics major faces a 9.0 percent chance of unemployment.

Median annual earnings also differ by choice of field of study. An actuarial science major will earn \$40,000; a hospitality management major will earn \$45,000; but accounting majors will earn \$70,000 on average. Those who tracked into management information systems and statistics will make \$97,000 on average.

How likely are business majors to earn an advanced degree? Using the BDCD tool, Shannon learns that a high proportion of business majors do not earn advanced degrees, although this varies by track. Eighteen percent of accounting majors get an advanced degree, while only 13 percent of actuarial science majors get an advanced degree. ■